[4910-13-P]

# DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2014-0109; Directorate Identifier 2013-SW-049-AD;

Amendment 39-17772; AD 2014-04-13]

**RIN 2120-AA64** 

Airworthiness Directives; Agusta S.p.A. Helicopters

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for Agusta S.p.A. (Agusta) Model AB412 and AB412 EP helicopters. This AD requires inspecting the tail rotor (T/R) blade for a crack, corrosion, nick, scratch, dent, or other damage and replacing or repairing the blade, depending on the damage. This AD is prompted by reports of T/R blade failures caused by fatigue cracking that originated from surface damage. These actions are intended to prevent failure of the T/R blade and subsequent loss of control of the helicopter.

**DATES:** This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain document listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- <u>Federal eRulemaking Docket</u>: Go to <a href="http://www.regulations.gov">http://www.regulations.gov</a>. Follow the online instructions for sending your comments electronically.
  - Fax: 202-493-2251.
- <u>Mail:</u> Send comments to the U.S. Department of Transportation, Docket
  Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey
  Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the "Mail" address between 9 a.m. and 5 p.m.,
  Monday through Friday, except Federal holidays.

# **Examining the AD Docket**

You may examine the AD docket on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the European Aviation Safety Agency (EASA) AD, any incorporated by reference service information, any comments received, and other information. The street address for the Docket Operations Office (telephone 800- 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this AD, contact AgustaWestland, Product Support Engineering, Via del Gregge, 100, 21015 Lonate Pozzolo (VA) Italy, ATTN: Maurizio D'Angelo; telephone 39-0331-664757; fax 39-0331-664680; or at <a href="http://www.agustawestland.com/technical-bulletins">http://www.agustawestland.com/technical-bulletins</a>. You may review the referenced

service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

**FOR FURTHER INFORMATION CONTACT:** Robert Grant, Aviation Safety Engineer, Safety Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email <a href="mailto:robert.grant@faa.gov">robert.grant@faa.gov</a>.

#### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, we invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that resulted from adopting this AD. The most helpful comments reference a specific portion of the AD, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit them only one time. We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this rulemaking during the comment period. We will consider all the comments we receive and may conduct additional rulemaking based on those comments.

#### **Discussion**

On April 22, 2008, we issued AD 2008-10-03, Amendment 39-15509 (73 FR 24858, May 6, 2008) for Bell Helicopter Textron Helicopters (Bell) Model 204B, 205A,

205A-1, 205B, 210, 212, 412, 412CF, and 412EP helicopters. AD 2008-10-03 required certain checks and inspections of each T/R blade at specified intervals and repairing or replacing, as applicable, any unairworthy T/R blade. AD 2008-10-03 was prompted by eight reports of fatigue cracking of T/R blades installed on Bell Model 212 and 412 helicopters (three failures on Bell Model 212 and five failures on Bell Model 412) with a T/R blade, part number (P/N) 212-010-750-009, -105, and -107. Three of the Model 412 failures occurred during flight.

After we issued AD 2008-10-03, an accident attributed to a T/R failure occurred. Because of this accident, we determined that a second, more detailed inspection was necessary to allow for an earlier detection of a crack or other damage. As a result, on July 11, 2013, we issued AD 2013-15-02, Amendment 39-17518 (78 FR 45845, July 30, 2013), which superseded AD 2008-10-03. These actions were intended to prevent failure of the T/R blade and subsequent loss of helicopter control.

Although similar failures have not been reported on Agusta helicopters, T/R blade P/N 212-010-750 may be installed on Agusta Model AB205A1, AB212, AB412, and AB412 EP helicopters. As a result, EASA, which is the Technical Agent for the Member States of the European Union, issued AD No. 2013-0185, dated August 14, 2013, to correct an unsafe condition for Augusta Model AB205A1, AB212, AB412, and AB412 EP helicopters. EASA advised that Bell reported some failures in T/R blade P/N 212-010-750 (all dash numbers), which originated from a fatigue crack derived from surface damages. EASA consequently requires detailed visual inspections of the T/R blade surface for nicks, dents, scratches, corrosion or cracks. EASA also requires repair or replacement of the T/R blade, depending on the outcome of those inspections.

#### **FAA's Determination**

These helicopters have been approved by the aviation authority of Italy and are approved for operation in the United States. Pursuant to our bilateral agreement with Italy, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA and determined that the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs.

#### **Related Service Information**

AgustaWestland, formerly Agusta S.p.A., issued Bollettino Tecnico No. 412-136, dated August 13, 2013 (BT), for Model AB412 and Model AB412 EP helicopters. The BT calls for visually inspecting the T/R blade surface for a crack, corrosion, a nick, a scratch, a dent, or other damage using a 3X magnifying glass every 25 hours time-inservice (TIS) or 30 days, whichever occurs first. The BT also calls for a recurring detailed visual inspection of the blade surface with a 10X magnifying glass between stations 20.00 to 35.00 from the T/R blade's leading edge to the trailing edge. If paint blistering, peeling, flaking, bubbling, or cracking exists, the BT calls for removing the paint and inspecting the affected area with a 10X magnifying glass. If a nick, scratch or dent exists, the BT calls for a visual inspection for a crack with a 10X magnifying glass and measuring any damage. If skin damages exceed maintenance manual limits or if a crack exists, the BT calls for removing the blade from service.

## **AD Requirements**

This AD requires within 25 hours TIS or 30 days, whichever occurs first, and thereafter at intervals not to exceed 25 hours TIS or 30 days, whichever occurs first:

- Cleaning each T/R blade by hand and, using a 3X or higher power magnifying glass and a light, visually inspecting the T/R blade skins, leading edge spar, doublers, grip plates, and trailing edge on both sides of each blade for a crack, corrosion, a nick, scratch, dent, or other damage. This inspection requires you to pay particular attention to the area located between blade station 20.00 to 35.00 and to the inboard T/R blade butt area near the attachment of the external balance weight and screws.
- Using a 10X or higher magnifying glass and a light, visually inspecting both sides of each blade for a crack or other damage between blade station 20.00 to 35.00.
- If blistering, peeling, flaking, bubbling, or cracked paint is detected anywhere on the blade, removing the paint and then visually inspecting the affected area for any corrosion or a crack using a 10X or higher magnifying glass and a light.
- If a nick, scratch, or dent is found anywhere on the blade, visually inspecting for a crack using a 10X or higher power magnifying glass and a light.
- Before further flight, removing from service any T/R blade that has a crack or that has corrosion, a nick, a scratch, a dent, or other damage that exceeds any of the maximum repair limits.
- Before further flight, repairing or removing from service any T/R blade that has any corrosion, nick, scratch, dent or other damage that is within the maximum repair limits.

## Differences between this AD and the EASA AD

The EASA AD applies to Augusta Model AB205A1 and AB212 helicopters. This AD does not because these helicopters have no FAA type certificate. This AD requires paying particular attention to both sides of each T/R blade in the area located 16 to 32

inches from the T/R blade tip when conducting the inspection using a 3X or higher power magnifying glass and a light. The EASA AD makes no such requirement.

# **Costs of Compliance**

There are no costs of compliance with this AD because there are no helicopters with this type certificate on the U.S. Registry.

## FAA's Justification and Determination of the Effective Date

There are no helicopters with this type certificate on the U.S. Registry. Therefore, we believe it is unlikely that we will receive any adverse comments or useful information about this AD from U.S. Operators.

Since an unsafe condition exists that requires the immediate adoption of this AD, we determined that notice and opportunity for public comment before issuing this AD are unnecessary because there are no helicopters on the U.S. registry and that good cause exists for making this amendment effective in less than 30 days.

## Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority

because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify that this AD:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- Is not a "significant rule" under DOT Regulatory Policies and Procedures
  (44 FR 11034, February 26, 1979);
- 3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

# § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2014-04-13 **Agusta S.p.A. Helicopters:** Amendment 39-17772; Docket No. FAA-2014-0109; Directorate Identifier 2013-SW-049-AD.

# (a) Applicability

This AD applies to Agusta S.p.A. (Agusta) Model AB412 and AB412 EP helicopters with a tail rotor blade (T/R) blade, part number (P/N) 212-010-750 (all dash numbers), installed, certificated in any category.

# (b) Unsafe Condition

This AD defines the unsafe condition as fatigue cracking of a T/R blade, which could lead to failure of the T/R blade and subsequent loss of control of the helicopter.

## (c) Effective Date

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

# (d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

# (e) Required Actions

- (1) Within 25 hours time-in-service (TIS) or 30 days, whichever occurs first, and thereafter at intervals not to exceed 25 hours TIS or 30 days, whichever occurs first:
- (i) Clean each T/R blade by hand using a mild soap and cheesecloth on both sides of the blade in a spanwise direction and dry thoroughly.

- (ii) Using a 3X or higher power magnifying glass and a light, visually inspect the T/R blade skin, leading edge spar, doublers, grip plates, and trailing edge on both sides of each blade for a crack, corrosion (which may be indicated by blistering, peeling, flaking, bubbling, or cracked paint), a nick, a scratch, a dent, or other damage. Pay particular attention to both sides of each T/R blade in the area located 16 to 32 inches from the T/R blade tip (blade station 20.00 to 35.00; the T/R blade tip is located at blade station 51) as depicted by the shaded area in Figure 2 of AgustaWestland Bollettino Tecnico No. 412-136, dated August 13, 2013 (BT). Also, pay particular attention to the inboard T/R blade butt area near the attachment of the external balance weight and screws and to any T/R blade surface that was snagged by cheesecloth, as this may be an indication of a crack or paint chip that could lead to corrosion.
- (iii) Using a 10X or higher power magnifying glass and a light, visually inspect both sides of each T/R blade for a crack, corrosion (which may be indicated by blistering, peeling, flaking, bubbling, or cracked paint), a nick, a scratch, a dent or other damage between blade station 20.00 to 35.00 as depicted by the shaded area in Figure 2 of the BT.
- (iv) If there is any blistering, peeling, flaking, bubbling, or cracked paint on a T/R blade, remove the paint from the affected area by sanding in a spanwise direction first with abrasive cloth or paper 240-grit or finer and then with abrasive cloth or paper 400-grit or finer. After paint removal, wipe area with a clean cloth dampened with alcohol and dry thoroughly and then visually inspect the affected area for any corrosion or a crack using a 10X or higher power magnifying glass and a light. If any corrosion is found, measure the depth of the damage.

- (v) If there is a nick, scratch, or dent on the T/R blade, visually inspect for a crack using a 10X or higher power magnifying glass and a light. Measure the depth of the damage.
- (2) Before further flight, remove from service any T/R blade that has a crack, corrosion, a nick, a scratch, a dent, or other damage that exceeds any of the maximum repair damage limits.
- (3) Before further flight, repair or remove from service any T/R blade that has corrosion, a nick, a scratch, a dent or other damage that is within the maximum repair damage limits.
- (4) Do not install on any helicopter T/R blade P/N 212-010-750 (all dash numbers) unless it has been inspected in accordance with the requirements of this AD.

# (f) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Robert Grant, Aviation Safety Engineer, Safety Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email <a href="mailto:robert.grant@faa.gov">robert.grant@faa.gov</a>.
- (2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

# (g) Additional Information

The subject of this AD is addressed in the European Aviation Safety Agency (EASA) AD. No. 2013-0185, dated August 14, 2013. You may view the EASA AD on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a> in Docket No. FAA-2014-0109.

# (h) Subject

Joint Aircraft Service Component (JASC) Code: 6410, tail rotor blades.

# (i) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
  - (i) AgustaWestland Bollettino Tecnico No. 412-136, dated August 13, 2013.
  - (ii) Reserved.
- (3) For Agusta service information identified in this AD, contact AgustaWestland, Product Support Engineering, Via del Gregge, 100, 21015 Lonate Pozzolo (VA) Italy, ATTN: Maurizio D'Angelo; telephone 39-0331-664757; fax 39-0331-664680; or at <a href="http://www.agustawestland.com/technical-bulletins">http://www.agustawestland.com/technical-bulletins</a>.
- (4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.For information on the availability of this material at the FAA, call (817) 222-5110.
- (5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, call (202) 741-6030, or go to:

http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Fort Worth, Texas, on February 20, 2014.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 2014-04274 Filed 03/07/2014 at 8:45 am; Publication Date: 03/10/2014]